### VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL

Release 4.4

NASA-NEMSCENT-VDD-13

**PrISMS Contract** 

August 31,1999



National Aeronautics and Space Administration

**George C. Marshall Space Flight Center** Huntsville, AL 35812

## VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL RELEASE 4.4

Submitted by			
No al Cont	na II	Data	
Neal Cant Functiona	reii I Area Lead	Date	
	Reviewed CSC	I by	
Steve Rowell Agencywide IRM, Property and Procurement Systems	Date	Jim Cofer Configuration Management	Date
Hector Garcia Agencywide IRM	Date	Richard Bishop DBA	Date

Prepared by

Computer Sciences Corporation, Contract NAS8-60000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GEORGE C. MARSHALL SPACE FLIGHT CENTER HUNTSVILLE, ALABAMA

August 31, 1999

# VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL RELEASE 4.4

Approved by	
Sheila Fogle Consolidation Center Project Manager	Date
Nikita Zurkin Program Functional Manager	Date

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GEORGE C. MARSHALL SPACE FLIGHT CENTER HUNTSVILLE, ALABAMA

August 31, 1999

#### **TABLE OF CONTENTS**

Section Page
1. INTRODUCTION
2. FUNCTIONAL INFORMATION       2-1         2.1. FUNCTIONAL CHANGES       2-1         2.2. FUNCTIONAL INTERFACES       2-1         2.3. CRITICAL ISSUES       2-1         2.4. AFFECTED DOCUMENTS       2-1         2.5. APPLICATION SYSTEM ADMINISTRATION       2-1
3. TECHNICAL INFORMATION       3-1         3.1. TECHNICAL SYSTEM INTERFACES       3-1         3.2. DATA DICTIONARY CHANGES       3-1         3.3. SOFTWARE OBJECT CHANGES       3-1         3.4. DATABASE ADMINISTRATION       3-1         3.4.1. Release Dataset Names       3-1         3.4.2. Inventory of Objects       3-1         3.4.3. Storage Considerations       3-1         3.4.4. Installation Procedures       3-1         3.5. OPERATIONAL PREPARATION       3-1
4. KNOWN AND OPEN PROBLEMS4-1
APPENDIX A - ABBREVIATIONS AND ACRONYMS
APPENDIX B - GLOSSARYB-1
APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES
APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS CENTRAL SOFTWARE RELEASE 4.4D-1

#### 1. <u>INTRODUCTION</u>

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS) Central. This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

#### 1.1. IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS Central, Release 4.4 and has an effective release date of August 31, 1999.

#### 1.2. PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

CCR <u>Title</u>

237 Valid Disposal Condition Codes

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

CCR <u>Title</u>

226 Capitalization Errors

#### 1.3. SCOPE

This VDD provides the functional and technical user of NEMS Central with information regarding the contents, status, and structure of Release 4.4, including the following:

- Changes implemented since Release 4.3.
- Validation procedures to ensure the reliability of release changes.
- References to other documentation affected by this release.
- Detailed software installation instructions.

No waivers are associated with this release.

#### 1.4. CONTACT POINTS

Sustaining Engineering for NEMS Central is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the function and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673

Email: neal.cantrell@msfc.nasa.gov

FAX: (256) 544-1836

#### 2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

#### 2.1. FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

#### 2.2. FUNCTIONAL INTERFACES

This section is not applicable for this release.

#### 2.3. CRITICAL ISSUES

This section is not applicable for this release.

#### 2.4. AFFECTED DOCUMENTS

No documents are affected by this release.

#### 2.5. APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

#### 3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

#### 3.1. TECHNICAL SYSTEM INTERFACES

This section is not applicable for this release.

#### 3.2. DATA DICTIONARY CHANGES

This section is not applicable for this release.

#### 3.3. SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

#### 3.4. DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

#### 3.4.1. Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

#### 3.4.2. Inventory of Objects

Refer to Appendix D, Paragraph 2.1, for an inventory of Natural object types.

#### 3.4.3. Storage Considerations

The changes represented by this release should not affect storage requirements.

#### 3.4.4. Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Central Software Release 4.4 for detailed software installation procedures.

#### 3.5. OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

#### 4. KNOWN AND OPEN PROBLEMS

The are no known or open problems related to this release.

#### **APPENDIX A - ABBREVIATIONS AND ACRONYMS**

CC Consolidation Center

CCR Change Control Request

CSC Computer Sciences Corporation

DBA Database Administrator

DR Discrepancy Report

FAX Electronic Facsimile Transmission

IRM Information Resources Management

JCL Job Control Language

MSFC Marshall Space Flight Center

NACC NASA Automated Data Processing (ADP) Consolidation Center

NASA National Aeronautics and Space Administration

NEMS NASA Equipment Management System

NPDMS NASA Property Disposal Management System

SESAAS Sustaining Engineering Support for Agencywide Administrative Systems

VDD Version Description Document

#### **APPENDIX B - GLOSSARY**

#### **Database Administration**

Responsibility for maintaining the physical database environment.

#### **Implementation**

The process by which a NASA site installs a NASA software release and places it into operational use.

#### **Operational Preparation**

Preparation by a NASA site for installation and use of a NASA application release.

#### **System Administration**

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

#### **APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES**

Index of validation procedures for changes in this release.

#### Section CCR Title

1.0 226 Capitalization Errors2.0 237 Valid Disposal Condition Codes

Details for the validation procedures follow:

#### 1.0 CCR 226 Capitalization Errors

NEMS Central – Transaction 38 is missing a move to work file 6 for the CAPITALIZATION-AMT. NEMS – MOVE is missing for the PREV-CAPITALIZATION-AMT. ADHOC report (955) will not display the new fields.

#### **Description of Change**

The missing MOVE statement to work file 6 for the CAPITALIZATION-AMT field was added.

#### **Functional Impact**

There is no functional impact as a result of this CCR.

#### **Validation Procedures**

Run the NEMS Central jobs with a transaction 38.
 Expected result: The CAPITALIZATION-AMT is moved to work file 6.

MODULE ID<br/>TRN038P1MODULE NAME<br/>Change Transaction 38 (Borrowed Out)TYPE<br/>Program

#### 2.0 CCR 237 Valid Disposal Condition Codes

The valid disposal condition codes are currently 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. The new valid disposal condition codes that GSA will accept are 1 (Excellent), 4 (Usable), 7 (Repairable), X (Salvage), and S (Scrap).

#### **Description of Change**

Utility programs were written to change table 510 and the NEMS-CENT-EQUIP and NEMS-CENT-TRANSFER files.

#### **Functional Impact**

There is no functional impact as a result of this CCR.

#### **Validation Procedures**

- Find cases on the NEMS-CENT-EQUIPMENT file that have condition codes of 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. Run NEUEQPPA in batch. Expected Results: The cases with condition codes of 1, 4, 7, S, and X should have the same condition codes. The other condition codes should be converted as follows: 2 = 1, 3 = 4, 5 = 4, 6 = 4, 8 = 7, and 9 = 7.
- Find cases on the NEMS-CENT-TRANSFER file that have condition codes of 1, 2, 3, 4, 5, 6, 7, 8, 9, S, and X. Run NEUXFRPA in batch. Expected Results: The cases with condition codes of 1, 4, 7, S, and X should have the same condition codes. The other condition codes should be converted as follows: 2 = 1, 3 = 4, 5 = 4, 6 = 4, 8 = 7, and 9 = 7.

<b>MODULE ID</b>	MODULE NAME	<u>TYPE</u>
NEUEQPPA	Update Condition Codes on Equipment file	Program
NEUXFRPA	Update Condition Codes on Transfer file	Program

## APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS CENTRAL SOFTWARE RELEASE 4.4

#### Introduction

#### Release information:

System Name: NEMS Central

Release Number: 4.4

Release Date: August 31, 1999 Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673

Email: neal.cantrell@msfc.nasa.gov

FAX: (256) 544-1836

The following datasets are located on the NASA Central Distribution Facility as NASA data sets.

- AIMS.NEMC.PROD.R440.R0899.DOC
- AIMS.NEMC.PROD.R440.R0899.SRC

#### **Installation Sequence**

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

#### 1.0 Back Up Existing Data

It is advisable to back up all NEMS CENTRAL files as a precautionary measure prior to installation.

#### 2.0 Copy Source/Object Code

#### 2.1 Copy Source Code

Load the NEMS Central source library from dataset AIMS.NEMSC.PROD.R440.R0899.SRC. The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NEMSCENT, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by Type		
GLOBAL DATA AREA	0	
LOCAL/PARAM DATA AREA	0	
MAPS	0	
HELP ROUTINES	0	
SUBROUTINES	0	
SUBPROGRAMS	0	
PROGRAMS	4	
COPYCODE	0	
TEXT	0	
PROCESS	0	
MISCELLANEOUS OBJECTS	0	
Total:	4	

#### 2.2 List of Source Code Modifications

The following are the modules added, modified and deleted.

#### Added Modules

Not applicable with this release.

#### **Changed Modules**

1.	NEMS	Program
2.	NEUEQPPA	Program
3.	NEUXFRPA	Program
4.	TRN038P1	Program

#### 2.3 Delete Source Modules

Not applicable with this release.

#### 2.4 Copy Object Modules

Not applicable with this release.

#### 3.0 Pre-Predict Data Conversion

Not applicable with this release.

#### 4.0 Install Predict

#### 4.1 Data Dictionary Changes

Not applicable with this release.

#### 4.1.1 Inventory of Objects

Not applicable with this release.

#### 4.1.2 Storage Considerations

Not applicable with this release.

#### 4.1.3 Physical File Changes

Not applicable with this release.

#### 5.0 Catalog Source Code

Run a batch job to catalog (CATALL) all modules in the NEMSCENT or other named library. It is not necessary to catalog the Global Data Area. You should receive 5 NATURAL 0002 errors for modules beginning with ADHOC21\* that concern trying to stow a dynamic program. It is not necessary to attempt to resolve the 5 errors. The NASA Batch standard parameters should be used for the compile.

After all objects are compiled, the NEMS CENTRAL application will run under the NASA On-line standard parameter.

#### 6.0 Post-Predict Data Conversion

There is no post-Predict data conversion required.

#### 7.0 Perform Release-Specific Procedures

#### 7.1 Disposal Condition Codes

Run the following programs in batch to update the condition codes on the NEMS-EQUIPMENT, NEMS-TRANSFER, and table 510 on NEMS-TABLE: NEUEQPPA, NEUXFRPA, and NDU510PA.

#### 8.0 Local JCL Mods

There are no Local JCL Mods with this release.

#### 9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.1 Copy Source Code
- 5.0 Catalog Source Code
- 7.1 Disposal Condition Codes